

REMARKS

Initially, in the Office Action dated May 5, 2005, the Examiner rejects claims 1 and 9 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,014,694 (Aharoni et al.) in view of U.S. Patent No. 6,658,476 (Van). Claim 3 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Aharoni et al. in view of Van and further in view of U.S. Patent No. 6,392,664 (White et al.). Claims 4 and 10 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Aharoni et al. in view of U.S. Patent No. 6,735,631 (Oehrke et al.). Claim 6 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Aharoni et al. in view of Oehrke et al. and further in view of White et al. Claims 7 and 11-13 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Aharoni et al. in view of Van and further in view of Oehrke et al. Claim 8 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Aharoni et al. in view of Van and further in view of Oehrke et al. and still further in view of White et al.

By the present response, Applicants have canceled claims 2 and 5 without disclaimer. Moreover, Applicants have amended claims 1, 4, 7 and 9-11 to further clarify the invention. Claims 1, 3, 4, and 6-13 remain pending in the present application.

35 U.S.C. §103 Rejections

Claims 1 and 9 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Aharoni et al. in view of Van. Applicants have discussed the

deficiencies of these references in Applicants' previously-filed response and reassert all arguments submitted in that response. Applicants respectfully traverse these rejections and provide the following additional remarks.

Regarding claims 1 and 9, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of each of these claims of, inter alia, storing information of a network protocol capable of video content transmission between the video content play terminal and the video content transmitting server, the network protocol information storing means including a table of protocols for facilitating communication for each combination of the video content transmitting server and the video content play terminal, or selecting a video content transmitting server from the plurality of video content transmitting servers based on a protocol determination of the protocols of the table in respect of the video content play terminal issuing the request to thereby determine the video content transmitting server capable of transmitting the requested video contents to the video content play terminal requesting the content transmission. The Examiner admits that Aharoni et al. does not disclose or suggest storing information of a network protocol capable of video content transmission, but asserts that these limitations in the claims of the present application are disclosed in Van at col. 2, lines 56-61, and col. 7, lines 27-37. However, these portions of Van merely disclose that a client is able to query a server to determine an ordered list of protocols that the server supports in the context of a transport protocol like HTTP, and the server maintains a list of

protocols that it supports, in order of preference, where the list of protocols is stored as a string, and when a new protocol is supported by the server it is added to this list by modifying the string. This is not storing information of a network protocol capable of video content transmission between the video content play terminal and the video content transmitting server where the network protocol information network storing means includes a table of protocols for facilitating communication for each combination of the video content transmitting server and the video content play terminal, as recited in the claims of the present application. Van merely discloses a list of protocols that the server can support. The list of protocols supported by the server is transmitted to the client and the client then must determine which protocol to use taking into consideration the most preferred protocol by the server (see col. 7, lines 1-6). Van does not disclose or suggest anything related to a table of protocols for facilitating communication for each combination of video content transmitting server and video content play terminal, as recited in the claims of the present application. Van merely relates to a server sending a list of supported protocols and a client having to determine which protocol to use based on this list. Further, the server and client disclosed in Van are not video content transmitting servers and video content play terminals, as recited in the claims of the present application.

Moreover, the Examiner asserts that Aharoni et al. discloses Applicants' claimed means for determining the video content server capable of transmitting video contents to a terminal that requested video transmission at col. 18, lines 3-61 by Aharoni et al.'s disclosure of a plurality of servers that each store data of a

different bandwidth and selecting a server based on a client's available bandwidth. However, this is not selecting a video content transmitting server from a plurality of video content transmitting servers based on a protocol determination of the protocols in the table in respect of the video content play terminal issuing the request to thereby determine the video content transmitting server capable of transmitting the requested video content to the video content play terminal requesting the video content transmission, as recited in the claims of the present application.

Aharoni et al. merely relates to adaptively transporting video over networks where the available bandwidth varies with time. Aharoni et al. does not disclose or suggest selecting a video content transmitting server from a plurality of video content transmitting servers, or making this selection based on a protocol determined from protocols in a table in respect of a video content play terminal issuing a request.

According to the present invention, a terminal requesting video content can make a request to a video content transmitting system for a relevant transmitting server from a plurality of servers based on determining protocols in a table that allow data communication between the requesting terminal and the server. This is not disclosed or suggested in any of the cited references.

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of each of claims 1 and 9 of the present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

Claim 3 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Aharoni et al. in view of Van and further in view of White et al. Applicants respectfully traverse this rejection.

White et al. discloses an entertainment head-end that provides broadcast programming, video-on-demand services, and HTML-based interactive programming through a distribution network to client terminals in subscribers' homes. A number of different features are provided, including novel user interfaces, enhanced video-on-demand controls, a variety of interactive services (personalized news, jukebox, games, celebrity chat), and techniques that combine to provide user experiences evocative of conventional television.

Applicants submit that claim 3 is dependent on independent claim 1 and, therefore, is patentable at least for the same reasons noted previously regarding this independent claim. Applicants submit that White et al. does not overcome the substantial defects noted previously regarding Aharoni et al. and Van. For example, Applicants submit that none of the cited references disclose or suggest a first network being used when a video content transmission request is transmitted to the video content transmitting system from the video content play terminal and a second network being used when the video contents are transmitted from the video content transmitting service to the video content play terminal in response to the video content transmission request, or storing an address for identifying the video content play terminal that issued the video content transmission request via the first network

and an address for identifying the video content play terminal receiving the video contents via the second network.

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of claim 3 of the present application. Applicants respectfully request that this rejection be withdrawn and that this claim be allowed.

Claims 4 and 10 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Aharoni et al. in view of Oehrke et al. Applicants respectfully traverse these rejections.

Oehrke et al. discloses a network and method of providing near 100% availability of services. Redirectors are implemented to direct network traffic to any of two or more application processors providing the same service. The redirectors are provided in data paths at network access points and at data centers with the application processors. The redirectors re-route traffic to other application processors when one processor is unavailable and load balance between available processors. To load balance, the redirectors collect various network management statistics from the processors to determine the most responsive processor for receiving traffic. The various network management statistics are shared among redirectors for efficient load balancing.

Regarding claims 4 and 10, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of each of these claims of, inter alia,

managing information of a total available bandwidth for video content transmission of a network route between each video content play terminal and each video content transmitting server, and information of a bandwidth now in use for video content transmission, the managing using information stored in a second table indicative of a correlation between each network route, the total available bandwidth and the bandwidth now in use. The Examiner asserts that Aharoni et al. discloses managing information of a total available bandwidth at col. 3, lines 47-49. However, these portions of Aharoni et al. merely disclose that the sending means comprises a rate control unit for measuring the available bandwidth of the network channel. This is not managing information of a total available bandwidth for video content transmission of a network route between each video content play terminal and each video content transmitting server, as recited in the claims of the present application. Aharoni et al. merely discloses measuring available bandwidth of a network channel for load balancing purposes. This is not managing information of a total bandwidth of a network route between each video content play terminal and each video content transmitting server.

Further, the Examiner admits that Aharoni et al. does not disclose or suggest managing information of a bandwidth now in use for the video content transmission, storing the information in a table and determining a server in accordance with the bandwidth now in use, but asserts that Oehrke et al. discloses these limitations at col. 3, lines 66 and 67, col. 4, lines 14-20 and col. 5, lines 40-43. However, these portions of Oehrke et al. merely disclose that network traffic is directed in a plurality

of data paths within the network to the potentially most responsive server so that the response time to users may not be slowed (i.e., load balancing), and that the redirector assesses several statistics for each application server to determine checking the destination address in order to distribute the load of user requests between application servers. This is not managing means including a table storing information indicative of a correlation between each network route, the total available bandwidth, and the bandwidth now in use, as recited in the claims of the present application. Oehrke et al. merely relates to balancing the load distributed across a plurality of servers. Oehrke et al. does not disclose or suggest information indicative of a correlation between each network route, total available bandwidth, and bandwidth now in use. Further, Oehrke et al. does not disclose or suggest anything related to a table storing the information indicative of the correlation. According to the present invention, data indicating a correlation or correspondence between the total bandwidth and the bandwidth now in use for each network routine is included, therefore making it possible to manage the total bandwidth and the bandwidth now in use for any network route even for each branched network route and allowing services according to a different terminal (see Fig. 3).

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of each of claims 4 and 10 of the present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

Claim 6 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Aharoni et al. in view of Oehrke et al. and further in view of White et al. Applicants respectfully traverse these rejections and submit that claim 6 is dependent on independent claim 4 and, therefore, is patentable at least for the same reasons noted previously regarding this independent claim. Applicants submit that White et al. does not overcome the substantial defects noted previously regarding Aharoni et al. and Oehrke et al. For example, Applicants submit that none of the cited references disclose or suggest where the network includes at least a first network and a second network, in one transmission mode, the first network being used when a video content transmission request is transmitted to the video content transmitting system to the video content play terminal and the second network is used when the video contents are transmitted from the video content transmitting server to the video content play terminal in response to the video content transmission request.

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of claim 6 of the present application. Applicants respectfully request that this rejection be withdrawn and that this claim be allowed.

Claims 7 and 11-13 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Aharoni et al. in view of Van and further in view of Oehrke et al. Applicants respectfully traverse these rejections.

Regarding claims 7 and 11, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of each of these claims of, inter alia, storing information of a network protocol usable for video content transmission between the video content play terminal and the video content transmitting terminal, said network protocol information storing means including a table of protocols for facilitating communication for each combination of video content transmitting server and video content play terminal; or selecting a video content transmitting terminal from the plurality of video content transmitting servers based on a protocol determination to the protocols of the table in respect of the request issuing terminal to thereby determine the video content transmitting server capable of transmitting the requested video contents to the requested video content play terminal, in accordance with the stored network protocol information and/or in accordance with the total available bandwidth, the bandwidth now in use and the calculated bandwidth necessary for video content transmission. The Examiner admits that Aharoni et al. does not disclose or suggest managing information of a bandwidth now in use for the video content transmission, storing the information in a table, or determining a server in accordance with the bandwidth now in use, but asserts that these limitations in the claims of the present application are disclosed in Oehrke at col. 3, lines 66 and 67, col. 4, lines 14-20 and col. 5, lines 40-43. However, as noted previously, these portions of Oehrke et al. merely disclose that network traffic is directed in a plurality of data paths within the network to the potentially most

responsive server so that the response time to users may not be slowed (i.e., load balancing), and that the redirector assesses several statistics for each application server to determine checking the destination address in order to distribute the load of user requests between application servers. This is not managing means including a table storing information indicative of a correlation between each network route, the total available bandwidth, and the bandwidth now in use, as recited in the claims of the present application. Oehrke et al. merely relates to balancing the load distributed across a plurality of servers. Oehrke et al. does not disclose or suggest information indicative of a correlation between each network route, total available bandwidth, and bandwidth now in use. Further, Oehrke et al. does not disclose or suggest anything related to a table storing the information indicative of the correlation.

Regarding claims 12 and 13, Applicants submit that these claims are dependent on one of independent claims 7 and 11 and, therefore, are patentable at least for the same reasons noted previously regarding these independent claims. For example, Applicants submit that none of the cited references disclose or suggest where the table for storing information of a network protocol usable for video content transmission between the video content play terminal and the video content transmitting terminal can select a network protocol in accordance with the request by the video content play terminal and a network infrastructure, or where the network information storing means includes a table storing a name of each network protocol capable of video content transmission between each terminal and each video content transmitting server.

Accordingly, Applicants submit that none of the cited references taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of each of claims 7 and 11-13 of the present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

Claim 8 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Aharoni et al. in view of Van and further in view of Oehrke et al. and White et al. Applicants respectfully traverse these rejections and submit that claim 8 is dependent on independent claim 7 and, therefore, is patentable at least for the same reasons noted previously regarding this independent claim. Applicants submit that White et al. does not overcome the substantial defects noted previously regarding the other cited references. For example, Applicants submit that none of the cited references disclose or suggest where the network includes at least a first network and a second network having a transmission bandwidth larger than a transmission bandwidth of the first network, the first network being used when a video content transmission request is transmitted to the video content transmitting system from the video content play terminal and the second network being used when the video contents are transmitted from the video content transmitting server to the video content play terminal in response to the video content transmission request.

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in

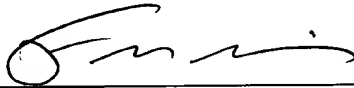
the combination of claim 8 of the present application. Applicants respectfully request that this rejection be withdrawn and that this claim be allowed.

In view of the foregoing amendments and remarks, Applicants submit that claims 1, 3, 4 and 6-13 are now in condition for allowance. Accordingly, early allowance of such claims is respectfully requested.

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Mattingly, Stanger, Malur & Brundidge, P.C., Deposit Account No. 50-1417 (referencing attorney docket no. 500.39531X00).

Respectfully submitted,

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.



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